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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,523	06/18/2001	Michael G. Coutts	7603.01	3099

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MICHAEL CHAN
NCR CORPORATION
1700 SOUTH PATTERSON BLVD
DAYTON, OH 45479-0001

EXAMINER	
DENNISON, JERRY B	

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/884,523	COUTTS ET AL.	
	Examiner	Art Unit	
	J. Bret Dennison	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *20-40,55-74 and 78-81* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *20-40,55-74 and 78-81* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Action is in response to Application Number 09/884,523 received on 18 June 2001.

2. Claims 20-40, 55-74, and 78-81 are presented for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 20-40, and 55-81 are rejected because they undue multiplicity based on 35 U.S.C. 112, second paragraph. Applicant presents an unreasonable number of claims which are repetitious and multiplied, the net result of which is to confuse rather than to clarify the claimed invention. The right of applicants to freedom of choice in selecting phraseology which truly points out and defines their inventions should not be abridged. Such latitude, however, should not be extended to sanction that degree of repetition and multiplicity which beclouds definition in a maze of confusion. See In re Chandler, 319 F.2d 211, 225, 138 USPQ 138, 148 (CCPA 1963). Examiner suggests that Applicant select three groups of claims, which best describe the invention without confusion. Appropriate correction is required.

Claims 20-25, 27, 28, 32-35, 38 and 39 recite the limitation "the control application". There is insufficient antecedent basis for this limitation. Examiner suggests using independent associated control application. Appropriate correction is required.

Claim 37 recites "different independent control applications". It is unclear to Examiner how they are different. Appropriate correction is required.

Claim 37 recites "the other independent control applications". There is insufficient antecedent basis for this limitation. Appropriate correction is required.

4. Claims 27-28 recites "a team building process for indicating (their) availability". It is unclear to Examiner what a team building process is. Appropriate correction is required.

Claim 40 recites the limitation "to operate in response to signals communicated from control applications of the other peripheral devices". It is unclear what is performing this operation. Examiner suggests adding "the independent control applications operating in response to signals communicated..." Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 20, 21, 23 34 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Ward (U.S. Patent Number 4,636,947).

5. Regarding claim 20, Ward disclosed, a self-service terminal comprising a plurality of peripheral devices each of the peripheral devices having an independent associated control application, the control applications being operable to communicate with each other, whereby, in use, a peripheral device operates in response to a signal generated by another peripheral device (Ward, col. 2, lines 35-60 and Fig. 2, Ward teaches a terminal in a network where each of the peripheral devices include a subsystem controller and memory for parallel transaction event processing among other devices, Ward teaches the protocol handler tasks for controlling data formatting and timing between devices communicating in an on-line network. In order for an ATM to properly operate, the peripherals function in a ordered sequence and therefore they do operate in response to signals generated by the peripheral devices whose operation comes beforehand in the sequence).

6. Regarding claim 21, Ward disclosed the limitations, substantially as claimed, as described in claim 20, including wherein the control applications communicate with each other using a peer-to-peer communication protocol (Ward, col. 3, lines 20-25, Fig. 2).

7. Regarding claim 23, Ward discloses the limitations, substantially as claimed, as described in claim 20, including wherein the control applications communicate with each other using signals addressed directly to selected peripheral devices so that a peripheral device only communicates with those peripheral devices whose operation depends on or is connected with the state of that peripheral device (Ward, col. 3, lines

40-60, col. 4, lines 1-10, 30-35, Ward disclosed that the peripherals operate in a transaction sequence, meaning that a peripheral device operates according to the operation of peripheral devices that operate before it).

8. Regarding claim 34, Ward discloses the limitations, substantially as claimed, as described in claim 20, including wherein, in use, each of the control applications are executed on a single central processor (Ward, col. 3, lines 20-26).

9. Regarding claim 36, Ward discloses the limitations, substantially as claimed, as described in claim 20, including wherein the peripheral devices are selected from the following peripheral devices: user interface, card reader, receipt printer, cash dispenser, and a bar code scanner (Ward, Fig. 2, 96).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 22, 24-33, 35 and 37-40, 55-74, and 78-81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ward in view of Kraslavsky et al. (U.S. Patent Number 5,537,626).

11. Regarding claim 22, Ward disclosed the limitations, substantially as claimed, as described in claim 20. Ward did not explicitly state wherein the control applications communicate with each other using broadcast signals in order to communicate a present state of the peripheral devices. Kraslavsky disclosed communication links that enable peripheral devices of a terminal to communicate with each other through broadcasting (Kraslavsky, col. 14, lines 5-22). It would have been obvious to one in the ordinary skill in the art at the time of the invention to incorporate the communication links of Kraslavsky into the invention of Ward in order to enable the peripheral devices of a terminal to communicate with one another, eliminating the need to use the Peripheral Control Unit.

12. Regarding claim 24, Ward disclosed the limitations, substantially as claimed, as described in claim 20. Ward did not explicitly state wherein a control application that operates in response to a signal communicated from another peripheral device acknowledges receipt of that signal. Kraslavsky disclosed peripheral devices responding to broadcast signals (Kraslavsky, col. 14, lines 5-15). See motivation above.

13. Regarding claim 25, Ward and Kraslavsky disclosed the limitations, substantially as claimed, as described in claim 20, including wherein each control application is operable to identify any failed peripheral device that does not acknowledge receipt of a

signal, and to communicate the functional state of that failed peripheral device to other control applications (Kraslavsky, col. 14, lines 5-15). See motivation above.

14. Regarding claim 26, Ward disclosed the limitations, substantially as claimed, as described in claim 20. Ward did not explicitly state wherein each peripheral device uses a registry for maintaining a record of the functioning peripheral devices in the terminal. Kraslavsky disclosed keeping statistics and a log of the devices (Kraslavsky, col. 14, lines 5-15). See motivation above.

15. Regarding claim 27, Ward disclosed the limitations, substantially as claimed, as described in claim 20. Ward did not explicitly state wherein the control applications implement a team building process for indicating their availability. Kraslavsky disclosed peripheral devices indicating availability (Kraslavsky, col. 14, lines 5-15). See motivation above.

16. Regarding claim 28, Ward and Kraslavsky disclosed the limitations, substantially as claimed, as described in claim 27, including wherein as part of the team building process, each control application associated with an available peripheral device transmits a start-up signal (Kraslavsky, col. 14, lines 5-15). See motivation above.

17. Regarding claim 29, Ward and Kraslavsky disclosed the limitations, substantially as claimed, as described in claim 28, including wherein the start-up signal includes an

identifier for the peripheral device being initialized and an address at which the peripheral device receives signals (Kraslavsky, col. 14, lines 5-15). See motivation above.

18. Regarding claim 30, Ward and Kraslavsky disclosed the limitations, substantially as claimed, as described in claim 29, including wherein the start-up signal is broadcast to other peripheral devices (Kraslavsky, col. 14, lines 5-15). See motivation above.

19. Regarding claim 31, Ward and Kraslavsky disclosed the limitations, substantially as claimed, as described in claim 30, including wherein the start-up signal is communicated directly to predetermined addresses that correspond to other peripheral devices (Kraslavsky, col. 14, lines 5-15, col. 17, lines 30-45). See motivation above.

20. Regarding claim 32, Ward disclosed the limitations, substantially as claimed, as described in claim 20. Ward did not explicitly state wherein the control application associated with each peripheral devices creates a functional group registry comprising the addresses and identity of each peripheral device that has sent a startup signal. Kraslavsky disclosed logging device information from startup signals received (Kraslavsky, col. 14, lines 5-15). See motivation above.

21. Regarding claim 33, Ward and Kraslavsky disclosed the limitations, substantially as claimed, as described in claim 32, including wherein each control application

transmits a shut-down signal when its peripheral device is no longer able to operate properly; each control application being operable to modify its functional group registry in response to a shut-down signal from another peripheral device to indicate the removal of that peripheral device from operation (Kraslavsky, col. 14, lines 5-15, 30-45).

22. Regarding claim 35, Ward disclosed the limitations, substantially as claimed, as described in claim 20. Ward did not explicitly state wherein, in use, each of the control applications is executed on a processor within its associated peripheral. Kraslavsky disclosed a printer containing its own processor and running applications (Kraslavsky, col. 14, lines 5-45).

23. Claims 37-40, 55-74, and 78-81 include limitations similar to the limitations found in claims 20-36, and are therefore rejected under the same art as claims 20-36 as being substantially similar.

Response to Amendment

Applicant's arguments and amendments filed on 19 January 2005 have been carefully considered but they are not deemed fully persuasive.

Thus, Applicant's arguments drawn toward distinction of the claimed invention and the prior art teachings on this point are not considered persuasive

Regarding the independent claims of the invention, a discussion about peripheral devices in a terminal should be made to clarify Examiner's interpretation. The definition

of a peripheral device is a computer device **that is connected to a computer and is controlled by the computer's processor**. By Applicant's arguments concerning the peripheral devices of the claimed invention, it is clearly misunderstood as to what a peripheral device is. The definition as stated above shows that a peripheral device is a device that is connected to a computer and controlled by that computer. In terms of Applicant's arguments regarding the claimed invention, Applicant argues that the peripheral devices control themselves. If this is the case, the devices that Applicant is referring to are not accurately defined as peripheral devices, being that they are not controlled by a computer. Applicant should go into further detail in the independent claims explaining the functionality of these peripheral devices to clarify the operation of the peripheral devices not only with each other, but with the computer in control (i.e. the terminal).

Examiner understands what Applicant is trying to claim, however the claims as currently presented may be interpreted differently. The independent associated control applications, as stated in the first action, can be interpreted as device drivers, which allow communication between peripheral devices. Being that the environment is an ATM, it is well known that peripheral devices act in sequence with one another, and the operation of one peripheral device is dependent on the operation of the previous peripheral device. It is also well known that peripheral devices are at the same level (i.e. peers), and that they communicate through broadcasting.

Furthermore, as it is Applicant's right to continue to claim as broadly as possible their invention, it is also the Examiner's right to continue to interpret the claim language

as broadly as possible. It is the Examiner's position that the detailed functionality that allows for Applicant's invention to overcome the prior art used in the rejection, fails to differentiate in detail how these features are unique.

It is the Examiner's position that Applicant has not yet submitted claims drawn to limitations, which define the operation and apparatus of Applicant's disclosed invention in manner, which distinguishes over the prior art.

Failure for Applicant to significantly narrow definition/scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant intends broad interpretation be given to the claims. The Examiner has interpreted the claims with scope parallel to the Applicant in the response and reiterates the need for the Applicant to more clearly and distinctly define the claimed invention.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Bret Dennison whose telephone number is (571) 272-3910. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J. B. D.
Patent Examiner
Art Unit 2143

BUNJOB JAROENCHONWANIT
PRIMARY EXAMINER